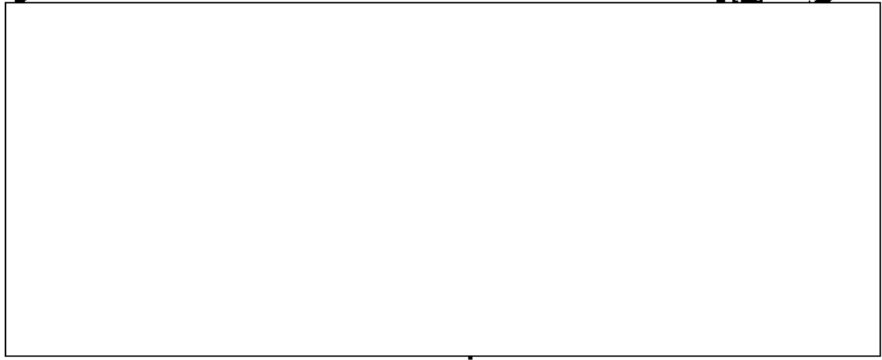


21-157



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} info

In order to reduce the demand on A&B time, equipment from the Design Unit should not be turned over to A&B for final check until after Design has checked the eq. as being ready for delivery. Be note deficiencies — especially the shorting difficulty

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# Office Memorandum • UNITED STATES GOVERNMENT

TO : Project Files - Design Unit

DATE: 14 August 1957

FROM : 

25X1

SUBJECT: A Cursory Evaluation of the Engineering Type CV-2  
Transistorized Frequency Converter

1. The CV-2 is a miniature transistorized radio frequency converter covering a frequency range of 6 to 12 megacycles with the output frequency peaked at approximately 1500 kc. The converter is intended to be used in conjunction with a standard broadcast receiver.

2. The following comments are noted:

- a. The measured operational battery drain was 325 ua.
- b. Both the antenna coil and the output transformer were altered during the test to meet specifications.
- c. On several occasions components mounted on the printed circuit board shorted to the case of the converter.
- d. Intermittent troubles were encountered because of improper ground connections between the printed circuit board and the case of the converter. The converter case being B+ return.
- e. The oscillator transistor was defective and had to be replaced.
- f. No provision for insulating the antenna lead-in from the case was provided.
- g. Screws fastening the printed circuit board to the case extend beyond the bottom of the case.
- h. The trimmer condenser control knob became loose after a short period of operation.
- i. No antenna, ground, or battery terminal markings were provided.

DOCUMENT NO. \_\_\_\_\_  
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CLASS CHANGED TO: TS S © 2010  
NEXT REVIEW DATE: \_\_\_\_\_  
AUTH: HR 70-2  
DATE: 4 DEC 1980 REVIEWER: 064540

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- j. The crystal opening was insufficient to permit proper seating of the crystal.
- k. No internal spurious frequencies were noted when the check was made with the broadcast receiver.
- l. The check for external spurious frequencies indicated that numerous signals were present.

3. In order to establish the relative gain of the converter a comparison check of the receiver and the converter-receiver was made at the frequencies of 6, 9, and 12 megacycles. An RCA standard wave broadcast receiver was used in the evaluation. The relative gain at 6 megacycles was 76, at 9 megacycles 158, and at 12 megacycles 233.

4. After completion of the cursory evaluation the CV-2 converter was returned to the Design Section for alterations and corrections.

25X1

Lab/GLG/HK/bao (14 Aug. 57)

Distribution:

Original & 1 - Addressee  
1 - A&A  
1 - Dev/s

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